WHAT IS CLAIMED IS:

1. A method of extracting an epipolar curve C'_q of the right image (or an epipolar curve $C_{q'}$ of the left image) corresponding to one point q of the left image (or one point q' of the right image) in a stereoscopic image photographed by a linear pushbroom (LPB) sensor, comprising the steps of:

assuming that the coordinates for the positions of the left and right cameras and the coordinates of the rotation angles of the left and right cameras are linear or nonlinear polynomials of a time or an image coordinate, and then deriving collinear equations consisting of various Expressions;

calculating the coordinate value of a straight line Sq for connecting a focal point S of the left image and the one point q of the left image;

substituting the calculated coordinate value of the straight line Sq into the collinear equation of the one point q' of the right image; and

combining the Expressions of the substituted collinear equation, and deriving an equation of the epipolar curve C'q of the right image for the one point q of the left image.

2. The method according to claim 1, wherein the derived equation of the epipolar curve C'q of the right image for the

one point q of the left image has the following Expression.

$$y_r = \frac{A_1 x_l + A_2 y_l + A_3}{(A_4 x_l + A_5 y_l\ A_6)\sin Q(x_r) + (A_7 x_l + A_8 y_l + A_9)\cos Q(x_r)}$$

Here, A1~A9 denotes constants determined by a given coordinate value (x_l, y_l) of the one point q of the left image, and $Q(x_r)$ denotes a linear or nonlinear equation of the coordinate x_r for the one point q' of the right image.

3. The method according to claim 1, wherein the epipolar curve of the linear pushbroom (LPB) sensor has the form of a curved line but not a straight line.

4. The method according to claim 1, wherein the epipolar curve of the linear pushbroom (LPB) sensor having the form of the curved line is assumed to be a straight line in a small region within the stereoscopic image photographed by the linear pushbroom (LPB) sensor.

5. The method according to claim 1, wherein if it is assumed that the epipolar curve C'_q of the right image is obtained from the one point q of the left image of the stereoscopic image photographed by linear pushbroom (LPB) sensor and the epipolar curve $C_{q'}$ of the left image is obtained from the one point q' of the right image corresponding to the one point q of the left image, in the case of the stereoscopic

image photographed by the linear pushbroom sensor all the points on the epipolar curve C'_q are not mapped onto the epipolar curve $C_{q'}$ and all the points on the epipolar curve $C_{q'}$ are not mapped onto the epipolar curve C'_q.

6. The method according to claim 5, wherein in the case where C'_q and $C_{q'}$ have been obtained, it is assumed that points on the epipolar curve C'_q are mapped onto the epipolar curve $C_{q'}$ and points on the epipolar curve $C_{q'}$ are mapped onto the epipolar curve C'_q only for both a small region near the one point q of the left image and a small region near the one point q′ of the right image.